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The amendments to the claims made by examiner's amendment on 7/12/2007 consisted of two parts. Part one was to renumber the claims. Part two was to amend the renumbered claims as indicated. Following these instructions should result in a claim set that reads as follows:

1. A microarray comprising an oligonucleotide probe comprising the sequence set forth in SEQ ID NO:143, wherein the microarray further comprises one or more oligonucleotide probes selected from the group consisting of SEQ ID NOS: 70-95 and 126-175.

2. The microarray of claim 1, wherein the oligonucleotide probes are arranged in a specific pattern.

3. A microarray as in claim 1, wherein the oligonucleotides are arranged in pairs: ps19 (SEQ ID NO:88) and ps20 (SEQ ID NO:89); ps5 (SEQ ID NO:74) and ps6 (SEQ ID NO:75); ps17 (SEQ ID NO:86) and ps18 (SEQ ID NO:87).

4. A diagnostic kit to detect *B. anthracis* target rRNA in a sample, the diagnostic kit comprising the microarray of claim 1.

5. A method for detecting an isolate of a *B. cereus* group in a sample, the method comprising:

(a) placing on a microarray of claim 1 oligonucleotide probes targeted to rRNA sequences wherein at least one mismatch is sufficient to discriminate among the *B. cereus* subgroups;

(b) providing conditions for hybridization of the probes with rRNA from the sample; and

(c) analyzing hybridization signals in the microarray from which the particular isolate is detected.

6. The method of claim 5, wherein the oligonucleotide probes are directed to 16S rRNA and 23S rRNA.

7. The method of claim 5, wherein the probes are labeled.

8. The method of claim 7, wherein the labels are selected from the group consisting of fluorescent dyes, radio isotopes, immunological labels, immuno-chemical labels and gold particles.

9. The method of claim 5, wherein the oligonucleotide probes discriminate one or more subgroups Anthracis, Cereus A, Cereus B, Thuringiensis A, Thuringiensis B, Mycoides A and Mycoides B.

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10. The method of claim 5, wherein pairs of oligonucleotide probes that discriminate subgroups Anthracis from Cereus A are ps21 (SEQ ID NO:90)/ps22 (SEQ ID NO:91).

11. The method of claim 5, wherein a ratio of hybridization signals of oligonucleotide probes ps17 (SEQ ID NO:86) and ps18 (SEQ ID NO:87) discriminates between *B. anthracis* Ames and *B. cereus* 9620.

12. The method of claim 5, wherein the oligonucleotide probes ps21 (SEQ ID NO:90) and ps22 (SEQ ID NO:91) discriminate *B. anthracis* Sterne from *B. cereus* HER 1414 and *B. thuringiensis* B8.

13. The method of claim 5, wherein the oligonucleotide probes are ps7, ps8 and ps9 to discriminate *B. thuringiensis* 4Q281 from the other *B. cereus* subgroup isolates.

14. An isolated oligonucleotide probe comprising the sequence of SEQ ID NO:143.

15. A method for taxonomically classifying *B. cereus* groups, said method comprising:

(a) developing strain- and subgroup-specific signature profiles of 16S and 23S rRNA sequences for *B. cereus* group isolates including subgroup *Mycoides B*, wherein the *Mycoides B* subgroup is differentiated by SEQ ID NO:143 from other subgroups; and

(b) using the signature profiles to construct phylogenetic trees in order to classify the various *B. cereus* group isolates.

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